

Partial ablation of uropygial gland effect on carcass characteristics of Akar Putra chicken

ABSTRACT

This study evaluated the effect of partial uropygialectomy (PU) on carcass traits of male and female Akar Putra chickens. Sixty chicks of each sex were evenly distributed into 5 treatment groups with 3 replicates per group containing 4 males and 4 females each, and reared for 12 wk. Homogeneity of the groups was satisfied with regard to the parity. Experimental treatments consisted of a control treatment (T1), and partial ablation of the uropygial gland was applied on the second, third, fourth, and fifth treatments at 3, 4, 5, and 6 wk of age, respectively. The chickens were fed ad libitum the same diets (1 to 13 d: starter; 14 d to slaughter: finisher). On the last d of the experiment, 12 birds were randomly selected from each treatment group (2 males and 2 females per replicate) and slaughtered to determine carcass characteristics, which included carcass weight, dressing percentage with or without eating giblets, and the relative weights of heart, liver, gizzard, thighs, wings, breast, back, and neck. From the results of the study, it was shown that the partial ablation of the uropygial gland at all ages had certain dependent effects concerning some carcass parameters, as shown by higher breast and back relative weights in males and breast relative weight in females. As a consequence, a positive effect also was noticed regarding the carcass morphology in terms of the increase in dressing percentage with or without eating giblets thus leading to an increase in the body weight and carcass weight. Furthermore, the best result was obtained in the second treatment when PU was applied at 3 wk of age compared with other experimental groups. Moreover, the current study provides a novel and economic alternative to enhance the body performance of poultry in general and Akar Putra chicken particularly.

Keyword: Avian gland; Uropygial gland; Akar Putra chicken